

21 James May

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Hamoptysis.

Reflecting on the anatomy of the organs of respiration, on the ramifications of their numerous blood vessels, the extreme tenderness of the parts concerned, and the many accidents to which they are liable, it becomes matter of wonder why hamorrhages from the lungs are not more frequent.

The causes of Hamoptysis are

- 1st Malconformation of the chest, derived either from our ancestors, or from diseases.
- 2^{ndly} Suppressions of accustomed evacuations; as the Menstrual Hamorrhoidal &c.
- 3^{rdly} Disipation, 4^{thly} Sedentary habits, 5^{thly} Violent Catarrhs, 6^{thly} Repelled Eruptions, 7^{thly} Violent passions
- 8^{thly} Sudden growth about the age of puberty
- 9^{thly} Lifting heavy weights, or any great bodily exertion.

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10^{thly} External violence, 11^{thly} Plethora and 12^{thly} From an abscess in the lung, succeeding badly treated pneumonia, or from tubercles ~~~

The Proximate or exciting causes of this disease are 1st Sudden changes from heat to cold, and vice versa - 2nd a diminution in the weight of the atmosphere, as has been frequently and fully proved by men when ascending high mountains: 3rd Violent stimulating passions. 4th Exertions of the lungs as in laughing, singing, hallooing, or any violent exercise of the organs of respiration: 5th Cases of this disease are more frequently met with in the spring, than in any other season of the year; but that it is attributable to a rarefaction of the fluids of the system by heat, as has been supposed by some very respectable authors, is still a doubtful question,] which has been little attended to by those eminent men who have illumined the western world with their useful discoveries;

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who have removed so many of the dark and
superstitious clouds, which from time immemorial,
have enveloped the medical knowledge of despotic
Europe; who, from the hands of Empiricks and
old women, have rescued this noble science,
and held it up in all its magnificence as
worthy of the fairest of Columbia's sons; to
whom we look up for instructions necessary
to prepare us to profit by the experience
which we may hereafter daily receive.

I think it would be much more rational to
account for the hemorrhages taking place by
the sudden change of the weather, than by the
rarefaction of the blood; it being incontestably
proved, that the blood in whatever climate or
season, is of the same temperature. - allowing
it possible that the blood could be rarefied by
any external impression, would not ^{the blood vessels} ~~the pores~~
be ^{dilated} ~~dilated~~, in proportion as its density is
lessened? —

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Hæmoptysis most frequently occurs between the age of fourteen and twenty-five. Dr. Rush says, that those persons who have been early instructed in vocal music, and who use their vocal organs moderately through life, are seldom affected by this disease. — As in most of the hæmorrhages of early life, the blood in hæmoptysis is arterial.

It occurs most frequently at night, while the lungs are in a passive state. —

It is divided by Cullen into active and passive

Of active hæmorrhage from the Lungs

This disease is ushered in with a Chill, Cold extremities, a sense of weight or fulness, pain in the back and breast, a sense of heat under the sternum, a difficulty of breathing, and generally a saltish taste on the tongue. —

These symptoms having continued for a longer or shorter time, a tickling irritation is felt in the trachea, causing a cough and
expectoration

of frothy florid blood, generally at first in small, ~~examination~~ but sometimes in very large quantities.

These symptoms if not put a stop to, return again in some short period; and at length, the patient, from the loss of so much blood, becomes pale; the discharges are more profuse; the pulse becomes small, quick, and frequent; the difficulty of breathing increases to a dangerous degree; the patient becomes very much debilitated, the extremities cold, syncope, nervous convulsions, and death.

This disease, like most others, may be mistaken for some other one, if the symptoms and circumstances of the case are not well attended to, and properly discriminated. Blood thrown out by way of the mouth is not always from the lungs; but may proceed from the stomach, fauces, or posterior nares. When it is from the posterior nares, or fauces, it is brought up by hawking, and by looking at the fauces we can see from whence the blood issues: it also flows in very small quantities.

Hæmorrhages from the stomach are almost invariably venous; it is of a clotted dark appearance, ~~the~~ thrown up by vomiting. — There is also great sense of weight, pain, and anxiety in the region of the stomach —

Of The Treatment of Hæmoptysis

The indications of treatment in active hæmoptysis are two: 1st to arrest the flow of blood; and 2nd to prevent a recurrence of the hæmorrhage.

The first indication requires a diminution of the force of the arterial system. To effect this the most potent remedy that we can call to our aid is.

Venesection.

The beneficial effects of this remedy, have been tested by long experience, and been allowed by the most respectable and learned physicians; yet it must not be forgotten, that some authors have denied its efficacy.

The first part of the paper is devoted to a general
 consideration of the subject, and to a statement of the
 objects of the present investigation. It is then divided
 into two parts, the first of which is devoted to a
 description of the apparatus and the method of
 experiment, and the second to a description of the
 results obtained. The results are then discussed, and
 compared with those of other investigators. The paper
 concludes with a summary of the results, and a
 statement of the conclusions to which they lead.

The quantity of blood which should be taken, ought to be in proportion to the violence of the case. We should never alter the origin of the vein, until we make a decided impression on the system, by reducing the pulse. Thus managed, Venesection, in the hands of a man of judgment, is of immense importance.

This should be the first remedy with which to begin the treatment of Hemoptysis - Its usefulness, in diminishing arterial action, is fully illustrated in Rush's medical enquiries Vol. 4 -

Muriate of Soda.

For the publicity of this remedy we are indebted to Dr. Rush - It is now very deservedly used by most of the physicians of the United States. The most proper mode of administering this medicine, is by giving about a tea-spoonful of clear, white table salt, every fifteen or twenty minutes, beginning, as soon as possible after the

hemorrhagi takes place - Dr Chapman thinks it acts more efficaciously by dissolving slowly on the tongue, than when it is previously dissolved in water.

Cathartics

These are seldom used in active Hemoptysis - But should the patient's bowels not be in a soluble state, it will be proper to administer some mild purgative. In some other Hemorrhages, cathartics might be very properly used, with a view of reducing plethora; but in diseases of the lungs, none but those of the mildest kind can be admitted; unless there are some other violent symptoms demanding them ~~~~

Emetics

Emetics were first brought into notice by Dr P. Robinson, who speaks very highly of them ~~~

They are dangerous remedies, and should not be used unless we have tried other ^{means} ~~remedies~~

which are more so. Employed in nauseating
doses, they become very useful in the
treatment of Hemorrhages - Morel's vitriolic
solution, was highly recommended by himself
and Dr. Barton - Dr. Chapman uses a combination
of Opium and Opium, (R. pulv: Opiae: gr. ii, pulv:
g. opii gr. ss. in one of these to be given every
hour or two to excite nausea, for ten, twelve,
or twenty four hours. Smokes are useful
when the hemorrhage is slight, and accompanied
with a discharge of tough mucus; they
determine to the surface, loosen cough, and
difficult respiration; promote expectoration
and equalize excitement.

Refrigerant

Among the refrigerants, may be classed all
the mineral salts: but as the nitrate of
potash is the most active, and more frequently
~~resorted to~~ resorted to, I shall only mention the properties
of it.



Nitre has been very highly spoken of in
hemoptysis. It has no astringent quality,
and should only be used as a powerful auxiliary
to the lancet, with a view of restraining
arterial action. — Dr. Dickson who speaks
very highly of it, directs it to be given in
form of an electuary — R. Sal. Nitre 3℥. Conserv.
Rosa 3℥. M. the size of a nutmeg to be taken
four, six or eight times a day — It may be
used more advantageously, I think, by
combining with it Emelic Tartar, forming
antimonial powders —

Cold applications.

Cold applications, as Ice, or very cold water applied
to the surface, particularly to the axilla or
armpit, are very useful remedies in
hemorrhages. It has been recommended by
some to wrap the whole body in a wet
sheet, to dash on cold water, or to immerse the
patient.

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These says Dr. Chapman are dangerous remedies, and should not be resorted to, but in the most desperate cases, as they might prove injurious by determining to the lungs.

Dr. Ghies, of Cremona, narrates the case of a young man who had frequent spitting of blood and violent fever; after other remedies had failed, he gave him extremely cold water to drink, a cup full every fifteen minutes: in a few hours the disease ceased, the fever and cough became less troublesome, and in a few days the patient recovered.

Acetate of Lead.

To Dr. Barton we owe the celebrity of this medicine in restraining internal hemorrhages.

It had long been mentioned among the remedies proper in this disease, but it, with that insubstantiality which is one of the characteristics of the American profession, just caught a prominence that must soon fade, and to administer a pessimal

Large enough to show the full effect of the medicine.
We directed it in doses of three or four grains
every two or three hours ^{it is most proper} ~~the~~ ~~ther~~ ~~h~~ ~~to~~
to give it combined with some narcotic; musk
is best. But sometimes it will succeed, or
administered alone, at many, and except in
violent cases to be given in much larger
doses, and at shorter intervals. This can be done
with perfect safety. I. Chapman mentions the
case of a woman who took two drachms of
the medicine without any other perceptible effect,
than an active purging; and large doses have
~~been~~ repeatedly been given without any bad
effect resulting therefrom. The administration
of sugar of lead, should be an active haemolytic,
always preceded by bloodletting.

Opium

The opium has in some cases answered
in haemorrhage, by allaying cough, and quieting
irritation, when Opium is to be preferred. ~~It then~~
~~the~~

ough and irritation are very liable some it may be
administered, notwithstanding the activity of the presen-

Local Applications

Hot & cold are applied incessantly over the seat of the disease,
are very well calculated, after the use of the lancet
has been pushed as far as the safety of the patient
will admit, to divert the morbid excitement from
the lungs to the surface. Blister are supposed to
be alike effectual, whether applied to the breast, neck,
or extremities.

In order that the above remedies may have their
full effect, the patient should be placed in a cool
well ventilated room. The patient should not be
allowed to talk, nor should company be admitted; the
diet ought to be very light - with acidulated
demulcent drinks.

Of Passive Hemorrhage from the Lungs.

This may proceed either originally, or from ^{the} previous
depletion of active Hemoptysis. The indication in
this disease is to restore the strength of the system and
time

to the blood vessels.

It is to be treated by administering some of the various tonics and astringents. Of the tonics, Bark is far preferable to any other of the class. Dr. Chapman thinks that its good effects are increased, by combining with it some one of the Chalybeates. When Bark of good quality cannot be obtained, its various substitutes as Cornus Florida, Oak Bark, Cherry Bark &c. may be used. Serravallo and Porter are useful auxiliaries. Portos should constitute nearly the whole of the patient's drink. The mineral and vegetable astringents should not be overlooked.

The mineral acids sometimes exercise a very great power over this disease. Of these the Sulphuric acid is preferable. The patient should take moderate Exercise particularly on horse back. The Diet should be generous.

To prevent a relapse in hemoptysis every thing should be avoided which may increase the action of the arteries. The patient should wear ~~wool~~ flannel next the skin, and avoid all exposure to cold or heat. If the patient is feverish, small

quantities of blood should be taken, and light doses of neutral salts. Dr Chapman thinks that when the predisposition continues, a slight salivation with mercury, by transferring the disease from the lungs to the salivary glands would remove it.

Finis

